Claims

1. A valve for a fuel injection system, having a valve seat embodied in a valve housing and having a valve member, which is movable in the valve housing and has a sealing face that when the valve is closed rests sealingly against the valve seat and when the valve is open, together with the valve seat, defines a valve gap through which fuel flows, characterized in that the valve member (6) has an encompassing hollow throat (18), which is disposed in the flow direction immediately downstream of the sealing face (10) and is adjoined by an encompassing cross-sectional thickening (20) of the valve member (6).

2. The valve in accordance with claim 1, characterized in that between the hollow throat (18) and the cross-sectional thickening (20), there is an encompassing edge (34), at which the outer circumferential surface portions (36, 38) of the hollow throat (18) and of the cross-sectional thickening (20) adjoining one another meet at an angle (β).

3. The valve in accordance with claim 2, characterized in that the circumferential surface portions (36, 38) of the valve member (6) meet at the edge (34) at a reflex angle (β).

4. The valve in accordance with claim 2 or 3, characterized in that the outer circumferential surface portion (38), adjoining the edge (34) on the side toward the

cross-sectional thickening (20), is oriented essentially parallel to a center axis (22) of the valve member (6).

5. The valve in accordance with one of claims 2 through 4, characterized in that the circumferential surface portion (36), adjoining the edge (34) on the side toward the hollow throat (18), is inclined at an angle of between 20° and 60° relative to a center axis (22) of the valve member (6).

6. The valve in accordance with one of the foregoing claims, characterized in that a radius of curvature of the hollow throat (18) is greater than 0.2 mm.

7. The valve in accordance with one of the foregoing claims, characterized in that the hollow throat (18) and the sealing face (8) merge smoothly with one another.

8. The valve in accordance with one of the foregoing claims, characterized in that the cross section of the valve member (6) tapers downstream of the cross-sectional thickening (20) in terms the flow direction.

9. The valve in accordance with one of the foregoing claims, characterized in that an outer circumferential surface of the valve member (6) is ground down, at least in the region of the sealing face (8) and of the hollow throat (18), but not in the region of the cross-sectional thickening (20).

10. A fuel injection pump, characterized by a valve in accordance with one of the foregoing claims.